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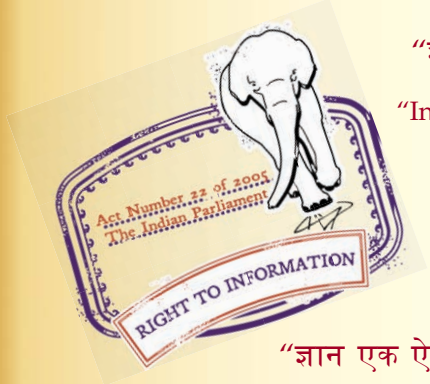

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Bhartṛhari—Nītiśatakam
"Knowledge is such a treasure which cannot be stolen"

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IS : 5001 (Part II) - 1973
(Reaffirmed 2006)

Indian Standard

GUIDE FOR PREPARATION OF DRAWINGS OF SEMICONDUCTOR DEVICES AND INTEGRATED CIRCUITS

PART II INTEGRATED CIRCUITS

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GUIDE FOR PREPARATION OF DRAWINGS OF SEMICONDUCTOR DEVICES AND INTEGRATED CIRCUITS

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Indian Standard

GUIDE FOR PREPARATION OF DRAWINGS OF SEMICONDUCTOR DEVICES AND INTEGRATED CIRCUITS

PART II INTEGRATED CIRCUITS

0. FOREWORD

0.1 This Indian Standard (Part II) was adopted by the Indian Standards Institution on 23 April 1973, after the draft finalized by the Semiconductor Devices and Integrated Circuits Sectional Committee had been approved by the Electrotechnical Division Council.

0.2 This standard lays down guiding principles for the preparation of outline drawings of integrated circuits. This standard should be used in conjunction with IS : 5001(Part I)-1969*.

0.3 While preparing this standard considerable assistance is derived from IEC Doc : 47 (Central Office) 384 'Mechanical Standardization — General rules for the preparation of outline drawings of integrated circuits', issued by the International Electrotechnical Commission.

0.4 This standard is one of a series of Indian Standards on dimensions of semiconductor devices and integrated circuits. A list of standards so far published under this series is given on page 22.

0.5 For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test, shall be rounded off in accordance with IS : 2-1960†. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

---

1. SCOPE

1.1 This standard (Part II) lays down guiding principles for the preparation of outline drawings of integrated circuits and to be used in conjunction with IS : 5001 (Part I)-1969*.

*Guide for preparation of drawings of semiconductor devices and integrated circuits: Part I Semiconductor devices.

†Rules for rounding off numerical values (*revised*).

2. TERMINOLOGY

2.0 For the purpose of this standard, the following terms and definitions shall apply.

2.1 Package Outline Drawing — The drawing of a package which specifies the dimensional characteristics and other closely associated features which are required for mechanical interchangeability.

2.2 Seating Plane — A plane which designates the plane of contact of the package, including any stand-off, with the surface on which it will be mounted.

NOTE — This is often used as the reference plane.

2.3 Base Plane — A plane drawn parallel to the seating plane through the lowest point of the package, excluding any stand-off.

2.4 Gauging Plane — A plane perpendicular to the terminals, at which the position of the terminals is controlled.

NOTE — In some packages, two or more of the above mentioned planes may coincide.

2.5 Terminal Position — One of a series of equally spaced locations on a circle or on a row which may or may not be occupied by a terminal.

2.6 Visual Index — A reference feature (for example mark, chamfer, notch, tab, depression, etc) which identifies the first terminal position.

2.7 Index Area — The area in which a portion or all of the visual index shall lie.

2.8 Mechanical Index — A feature (for example tab, notch, flat, groove, etc) which provides orientation during automatic handling.

NOTE — Where possible, the mechanical index should coincide with the visual index.

2.9 Index Centreline — A centreline through a visual index feature (for example tab) which is used to orientate the index with the first terminal position.

2.10 Grid Reference Corner — The first terminal position (viewed from the free end of the terminals) in an alpha-numeric grid system.

2.11 Terminal Row — A series of equally spaced terminal positions which are located on a straight line.

2.12 Terminal Circle — A series of equally spaced terminal positions which are located on a circle.

3. CLASSIFICATION AND CROSS REFERENCING OF PACKAGES

3.1 Classification of Packages — Packages are classified into five forms each of which having a particular scheme of lead configuration in relation to

the device body. This is done in order to relate the physical device quickly back to its outline drawings. The five forms are defined as follows:

Form 1 — those class of devices with any shape of body having leads extending from one face of the body but lying within the periphery of that face and emerging at right angles to it. The leads are located on a standard linear or rectangular grid.

Form 2 — those class of devices with any rectangular shape of body with leads emerging from one or more sides and subsequently being bent towards seating plane. The leads are located on a standard linear or rectangular grid.

Form 3 — those class of devices with circular shape of body having leads extended from one face of the body but lying within the periphery of that face and emerging at right angles to it. The leads are located in one or more lead circles.

Form 4 — those class of devices with any shape of body with leads emerging perpendicularly from one or more sides and extending peripherally outwards. The leads terminate in a standard linear or rectangular grid.

Form 5 — those class of devices which are combination of axial and peripheral or which for other reasons do not fit in the axial or peripheral categories, for example leadless packages.

3.2 Cross referencing of package is achieved by using the drawings of Appendix A as follows:

a) *Form* 1 (*Axial*) — Figures 1, 2, 3, 4, 5 and 6
b) *Form* 2 (*Axial*) — Figures 7, 8 and 9
c) *Form* 3 (*Axial*) — Figures 10, 11 and 12
d) *Form* 4 (*Peripheral*) — Figures 13, 14, 15 and 16
e) *Form* 5 (*Special*) — For this form no examples are given in Appendix A and refers to figures which are combination of axial and peripheral or which for other reasons do not fit in the axial or peripheral categories, for example leadless package.

4. TERMINAL IDENTIFICATION AND NUMBERING OF TERMINALS

4.1 The numbering and identification of terminals shall be made in accordance with **7.2** of IS : 5001 (Part I)-1969*.

5. DIMENSIONS AND REFERENCE LETTER SYMBOLS

5.1 Seated Height (*a*) — Distance from the seating plane to the highest point of the package.

*Guide for preparation of drawings of semiconductor devices and integrated circuits: Part I Semiconductor devices.

5.2 Stand-Off Height (A_1) — Distance between the seating plane and the base plane.

5.3 Package Height (A_2) — Distance from the base plane to the highest point of the package.

5.4 Terminal Circle Diameter (ϕa, ϕa_A, ϕa_B, **etc**) — Diameter of the circle upon which the terminal positions are located. ϕa should be used for the largest pitch circle diameter, when there is more than one pitch circle present.

5.5 Stand-Off Major Dimension (B) — Major dimension of the stand-off cross section.

5.6 Stand-Off Minor Dimension (B_1) — Minor dimension of the stand-off cross section.

5.7 Stand-Off Diameter (ϕB) — Diameter of the stand-off cross section.

5.8 Terminal Width (b) — Major dimension of the cross section of a terminal.

5.9 Other Terminal Width(s) (b_1, b_2, b_3, **etc**)

5.10 Terminal Diameter(s) (ϕb, ϕb_0, ϕb_1, ϕb_2, ϕb_3, **etc**) — Diameter of the circumscribed circle containing the terminal.

NOTE — ϕb_0 and ϕb_2 usually refer to diameters which are closely controlled over a specified terminal length (*see also* Fig. 10 and 11).

5.11 Terminal Thickness (c) — Minor dimension of the cross section of terminal.

5.12 Package Length (D) — Major dimension of the package, excluding terminals, measured in a plane parallel to the seating plane.

NOTE — If terminals are presented for mounting in two opposite directions only, they are deemed to extend in the width direction (E).

5.13 Other Package Length(s) (D_1, D_2, **etc**) — Other package lengths, usually smaller than D.

5.14 Package Diameter (ϕD) — Major diameter of the package, excluding terminals, measured in a plane parallel to the seating plane.

5.15 Other Package Diameter(s) (ϕD_1, ϕD, **etc**) — Other package diameters, usually smaller than ϕD.

5.16 Stand-Off Spacing, Linear (d, d_1, d_2, d_A, d_B, **etc**) — Linear spacing between true positions of stand off centres.

5.17 Package Width (E) — Minor dimension of the package, excluding terminals, measured in a plane parallel to the seating plane.

5.18 Other Package Width(s) (E_1, E_2, **etc**) — Other package widths, usually smaller than E.

5.19 Terminal Spacing, Linear (e, e_1, e_2, e_A, e_B, **etc**) — Linear spacing between true positions of terminal centres.

5.20 Flange Zone Height (F) — Overall dimension of the flange zone including any fillet, measured from the base plane.

5.21 Flange Height (F_1) — Flange dimension excluding any fillet.

5.22 Package Length Zone (G_D) — Length of a zone which includes the actual package length, package irregularities and the uncontrolled part of any peripheral terminals which are presented for mounting in the length direction.

5.23 Package Width Zone (G_E) — Length of a zone which includes the actual package width, package irregularities and the uncontrolled part of any peripheral terminals which are presented for mounting in the width direction.

5.24 Package Diameter Zone (ϕG) — Diameter of a zone which includes the actual package diameter, package irregularities and the uncontrolled part of any peripheral terminals which are presented radially.

5.25 Overall Length (H_D) — Largest overall dimension, including package length, of peripheral terminals which are presented for mounting in the length direction.

5.26 Overall Width (H_E) — Largest overall dimension, including package width, of peripheral terminals which are presented for mounting in the width direction.

5.27 Overall Diameter (ϕH) — Largest overall diameter of peripheral terminals which are presented for mounting radially.

5.28 Index Height or Depth (h) — Height or depth of index feature.

5.29 Index Width (j) — Width of index feature.

5.30 Length of Index Feature (k) — Length of index feature. On cylindrical packages the index length (for example tab) is measured from the maximum overall diameter (ϕD) of the device.

5.31 Terminal Length(s) (L, L_0) — Length(s) of terminal available for mounting, measured from the seating plane.

NOTE — L_0 usually refers to that part of the terminal over which the diameter (ϕb_0) is closely controlled (*see* Fig. 11).

5.32 Terminal Length(s) (L_D, L_E) — Controlled terminal zone(s) for mounting, measured from ends of peripheral terminals.

5.33 Terminal Length(s) (L_1, L_2, L_3, **etc**) — Terminal length(s) measured from the base plane.

NOTE — $L_2 - L_1$ usually refers to that part of the terminal over which terminal diameter (ϕb_2) is closely controlled.

5.34 Mounted Length (M_D) — Overall length, measured in the D direction, including terminals when they are bent to be perpendicular to the seating plane.

5.35 Mounted Width (M_E) — Overall width, measured in the E direction, including terminals when they are bent to be perpendicular to the seating plane.

5.36 Quantity of Terminal Positions (n) — Total quantity of potential terminal positions in accordance with the specified terminal position designation system. The actual quantity of terminals present may be less than n.

5.37 Allowable Quantity of Missing Terminals (n_1) — Maximum quantity of terminal positions which can be unoccupied.

5.38 Package Mounting Hole Diameter (ϕP) — Diameter of the hole in the package for mounting.

5.39 Terminal Emergence Height (Q) — Distance from the seating plane to the underside of the terminals where they emerge from the package.

5.40 Terminal Emergence Dimensions (Q_1) — Distance from the top surface of the package to the top surface of terminals where they emerge from the package.

5.41 Other Terminal Emergence Dimensions (Q_2, Q_3, **etc**) — Dimensions of other terminal features....

5.42 Package Overhang(s) (Z, Z_1, Z_2, **etc**) — Distance from the end terminal true position to the extremity of the package. In the case where the terminals extend beyond the package, Z, Z_1 shall be specified as zero, negative dimensions shall not be used. The overhang at the opposite end of the package, if different from Z, shall be designated as Z_1 (*see also* Fig. 1).

Examples:

$$Z \leqq \frac{e}{2}; \quad \frac{e}{2} < Z \leqq e; \quad e < Z \leqq \frac{3e}{2}$$

5.43 Index Datum Angle (α, α_A, α_n, **etc**) — Angular spacing between the index feature (datum) and the first terminal true position on a terminal circle.

α_A should be used for the angular spacing between the index feature and the first terminal located on the largest diameter circle.

5.44 Terminal Spacing, Angular (β, β_A, β_B, **etc**) — Angular spacing between true positions of terminal centres. β_A refers to the largest diameter circle.

5.45 Angles, Base (γ, γ_1, γ_2, **etc**) — Other angular features associated with the base.

5.46 Terminal Spread, Angular (θ) — Angle between the terminal and a line perpendicular to seating plane.

5.47 Angles, Package (θ_1, θ_2, **etc**) — Other angular features associated with the package.

6. DRAWING LAYOUT

6.1 The requirements of **4.1** of IS : 5001 (Part I)-1969* are applicable.

7. DIMENSIONING AND TOLERANCES

7.1 The requirements of **4.2** of IS : 5001 (Part I)-1969* are applicable except for **4.2.7**.

7.2 The limits which should normally be given for the dimensions listed in **5** are contained in table in Appendix B.

8. RULES FOR CODING

8.1 The provisions of **8.1** and **8.2** of IS : 5001 (Part I)-1969* as applicable to device outlines are relevant.

9. EXAMPLES OF DRAWINGS

9.1 Appendix A covers typical examples of drawings or integrated circuit outlines, arranged in the order indicated in **3**.

*Guide for preparation of drawings of semiconductor devices and integrated circuits: Part I Semiconductor devices.

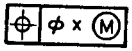
APPENDIX A

(Clauses 3.2 and 9.1)

EXAMPLE DRAWINGS SHOWING CROSS-REFERENCING OF PACKAGES, UTILIZATION OF REFERENCE LETTER SYMBOLS, TERMINAL IDENTIFICATION AND INDEX AREA

A-0. GENERAL

A-0.1 Dimensions shown between brackets may be omitted where appropriate.

In the specified drawing, the letter *x* in the symbol will be replaced by the appropriate tolerance value. 

A-0.2 The index area is shown on the drawings as an hatched zone.

A-1. EXAMPLES OF DRAWINGS

A-1.1 Examples of drawings showing cross-referencing of packages, utilization, reference letter symbols, terminal identifications and index area are given in Fig. 1 to 16.

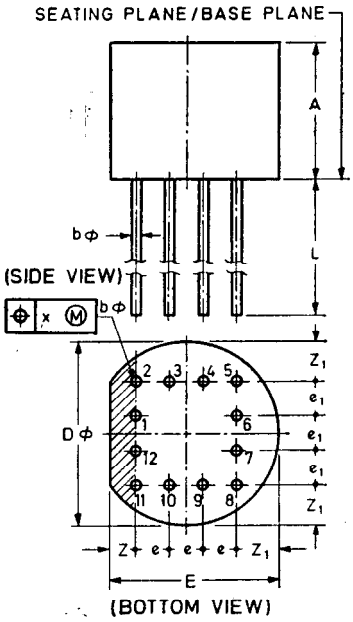


FIG. 1

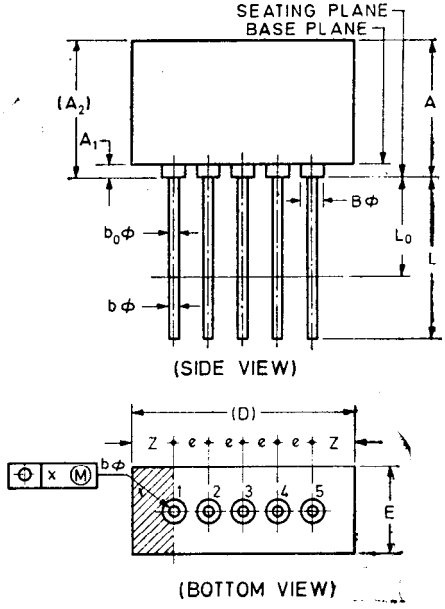


FIG. 2

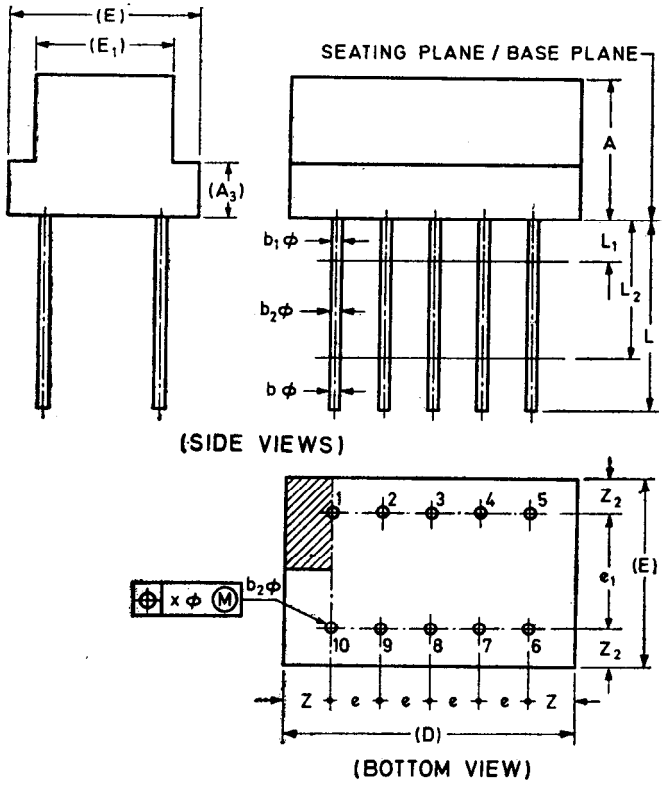

(E)
(E1)
(A3)
SEATING PLANE / BASE PLANE
A
b1φ
b2φ
bφ
L1
L2
L
(SIDE VIEWS)
1
2
3
4
5
10
9
8
7
6
Z2
e1
(E)
xφ M
b2φ
Z e e e e e Z
(D)
(BOTTOM VIEW)

FIG. 3

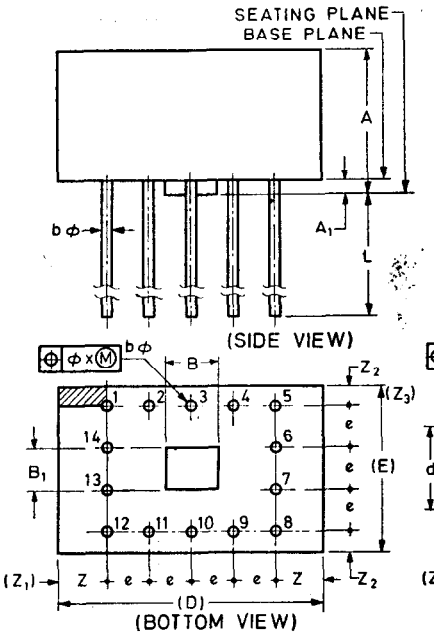


FIG. 4

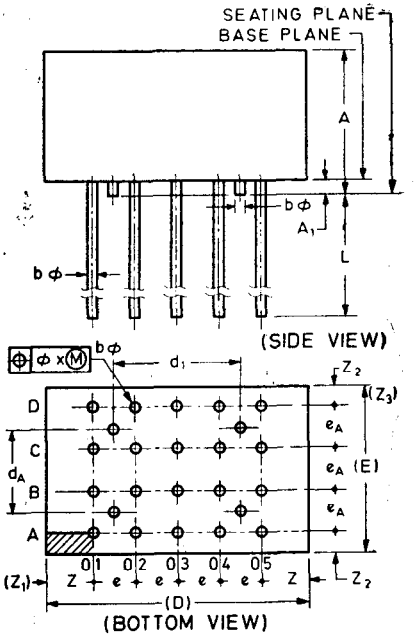


FIG. 5

NOTE — In this example, it is assumed that $el = 2\,eA$ and the numbering system follows that in Amendment No. 1 to IS: 5001 - 1969 'Guide for the preparation of drawings of semiconductor devices'.

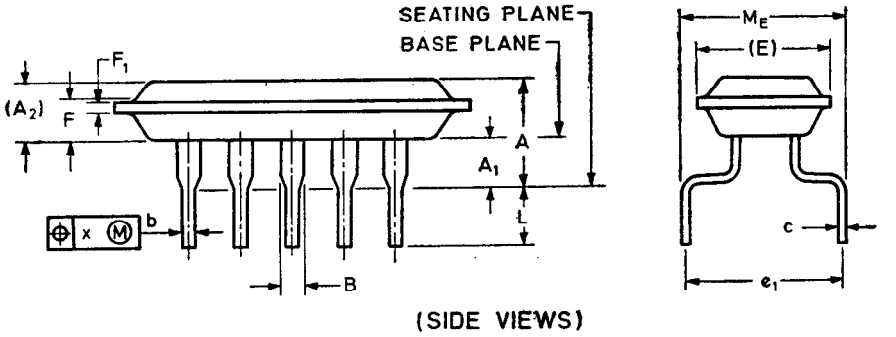

SEATING PLANE
BASE PLANE
F1
(A2)
F
A
A1
L
x M
b
B
ME
(E)
c
e1
(SIDE VIEWS)
1 2 3 4 5
10 9 8 7 6
Z e e e e Z
(D)
(BOTTOM VIEW)

FIG. 6

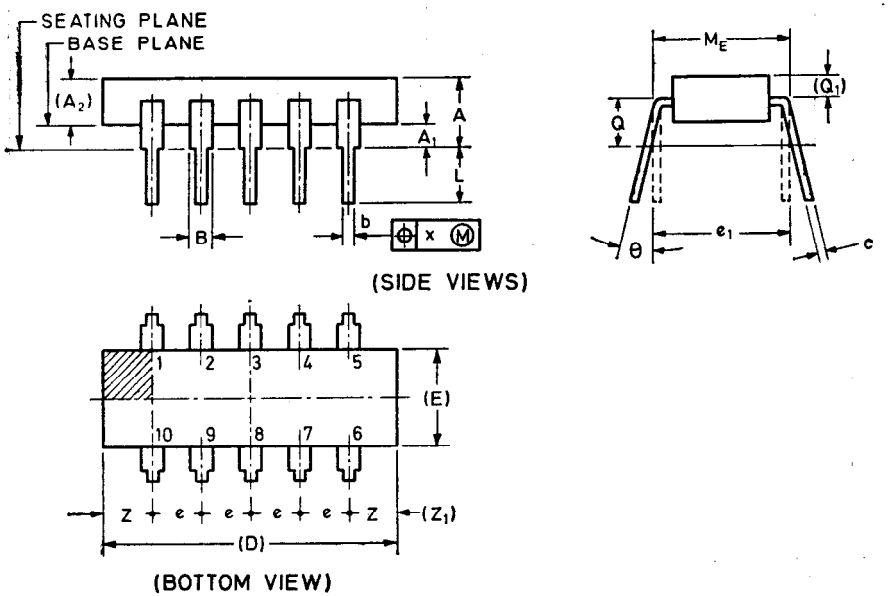

SEATING PLANE
BASE PLANE
(A2)
A
A1
L
B
b
x M
(SIDE VIEWS)
ME
(Q1)
Q
θ
e1
c
1 2 3 4 5
10 9 8 7 6
(E)
Z e e e e e Z
(Z1)
(D)
(BOTTOM VIEW)

FIG. 7

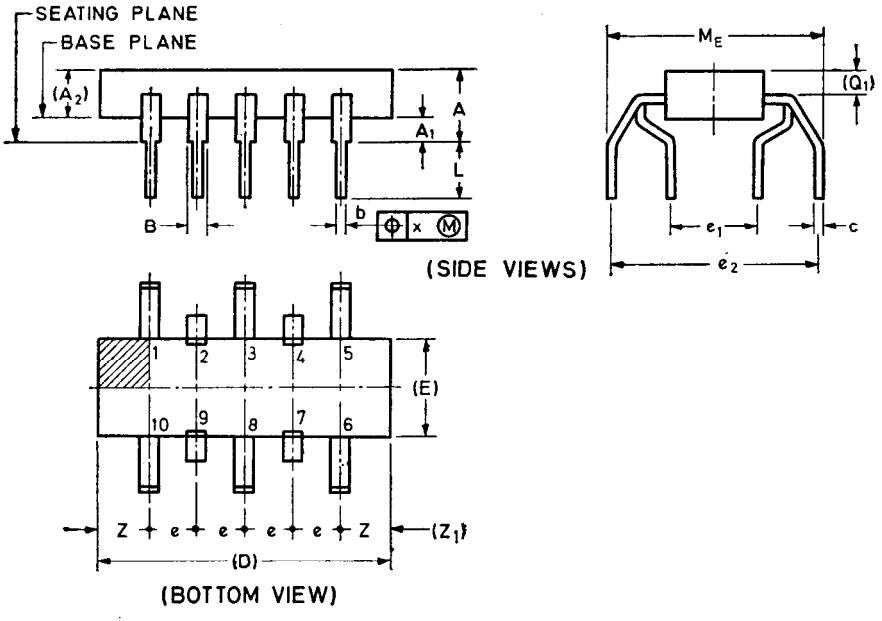

SEATING PLANE
BASE PLANE
(A2)
A
A1
L
B
b
x M
ME
(Q1)
e1
c
e2
(SIDE VIEWS)
1
2
3
4
5
10
9
8
7
6
(E)
Z
e
e
e
e
Z
(Z1)
(D)
(BOTTOM VIEW)

FIG. 8

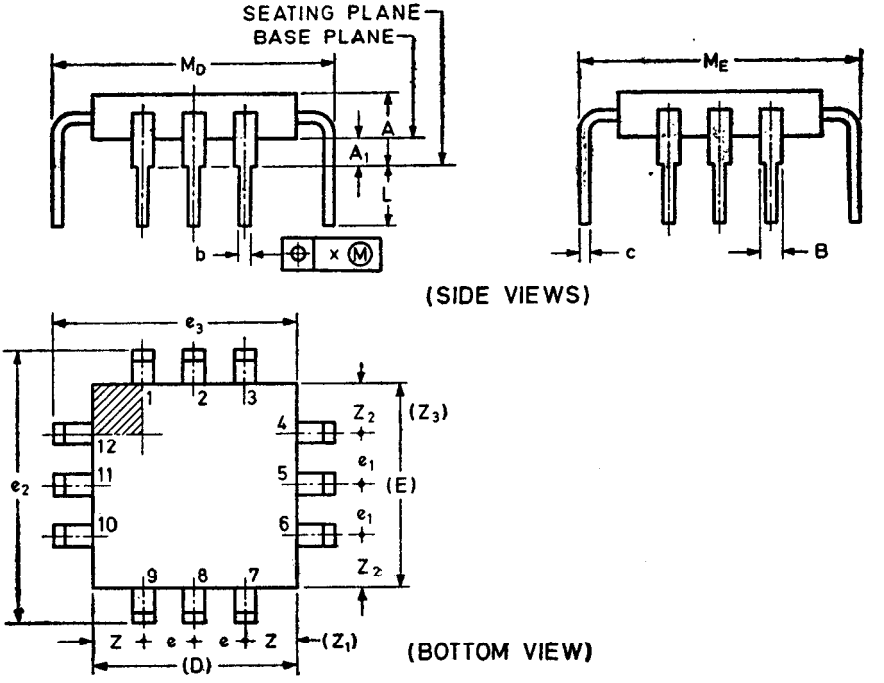

SEATING PLANE
BASE PLANE
MD
A
A1
L
b
x M
ME
c
B
(SIDE VIEWS)
e3
1
2
3
4
5
6
7
8
9
10
11
12
e2
Z2
(Z3)
e1
(E)
e1
Z2
Z
e
e
Z
(Z1)
(D)
(BOTTOM VIEW)

FIG. 9

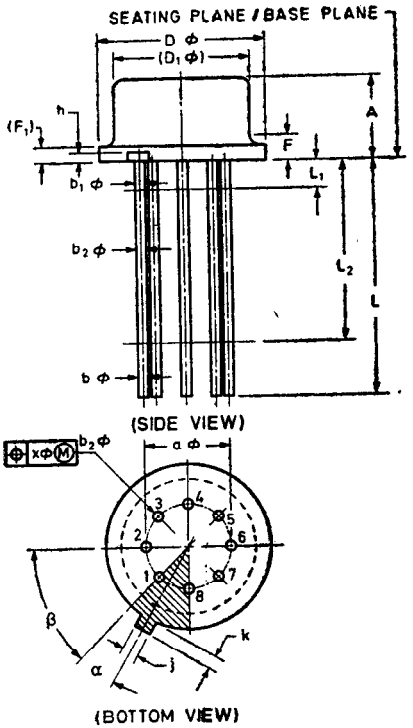

SEATING PLANE / BASE PLANE
D Φ
(D1 Φ)
h
(F1)
F
A
L1
b1 Φ
b2 Φ
L2
L
b Φ
(SIDE VIEW)
xΦM
b2 Φ
a Φ
1
2
3
4
5
6
7
8
β
α
j
k
(BOTTOM VIEW)

FIG. 10

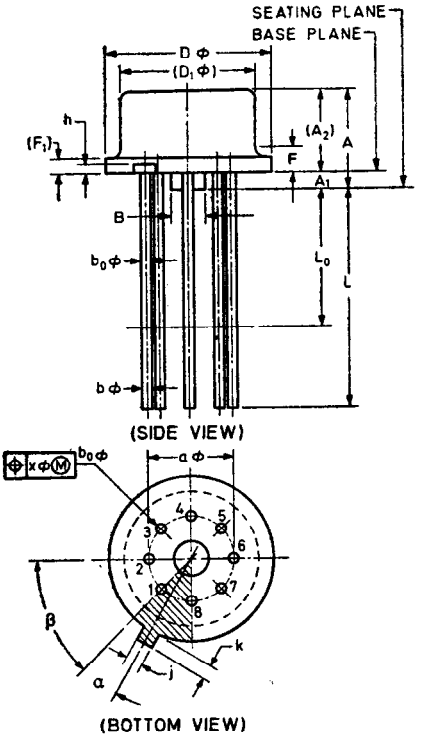

SEATING PLANE
BASE PLANE
D Φ
(D1 Φ)
h
(F1)
F
(A2)
A
A1
B
b0 Φ
L0
L
b Φ
(SIDE VIEW)
xΦM
b0 Φ
a Φ
1
2
3
4
5
6
7
8
β
α
j
k
(BOTTOM VIEW)

FIG. 11

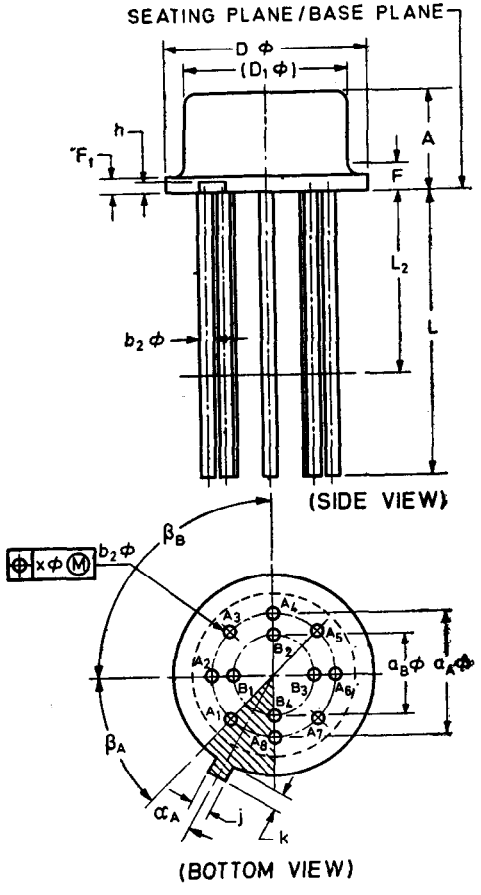
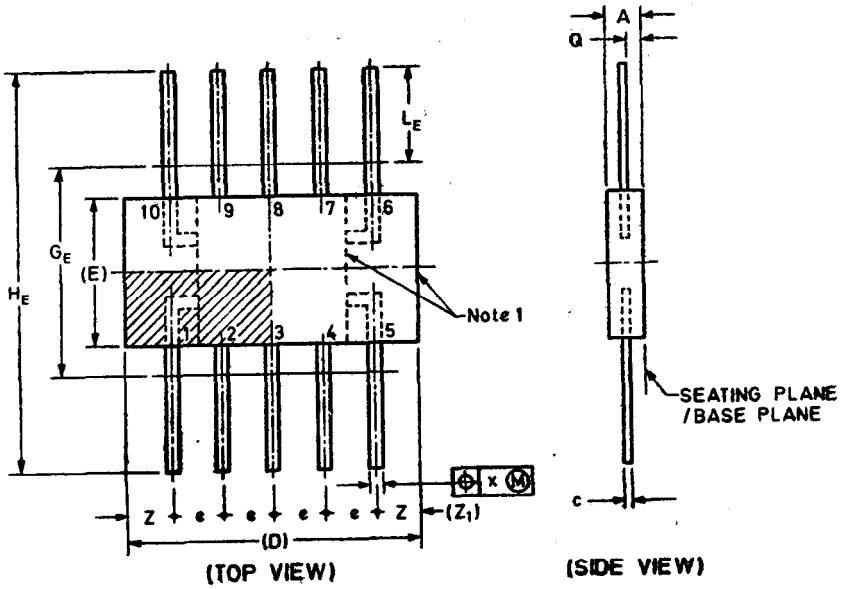

SEATING PLANE/BASE PLANE
D Φ
(D1 Φ)
h
F1
A
F
L2
L
b2 Φ
(SIDE VIEW)
βB
b2 Φ
xΦ M
A3
A4
A5
A2
B2
aBΦ
aAΦ
B1
B3
A6
B4
A1
A7
A8
βA
αA
j
k
(BOTTOM VIEW)

FIG. 12



NOTE 1 Optional end configuration.

FIG. 13

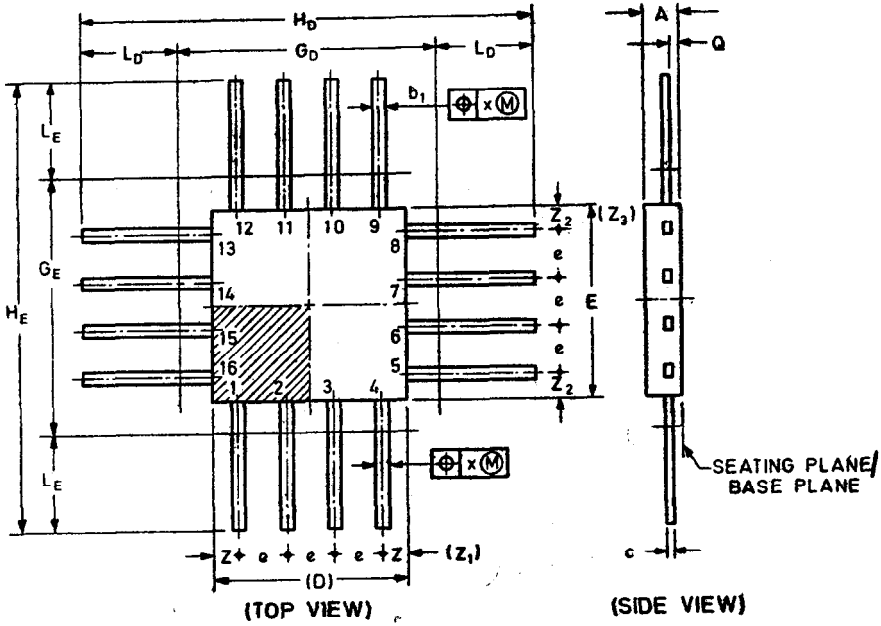


FIG. 14

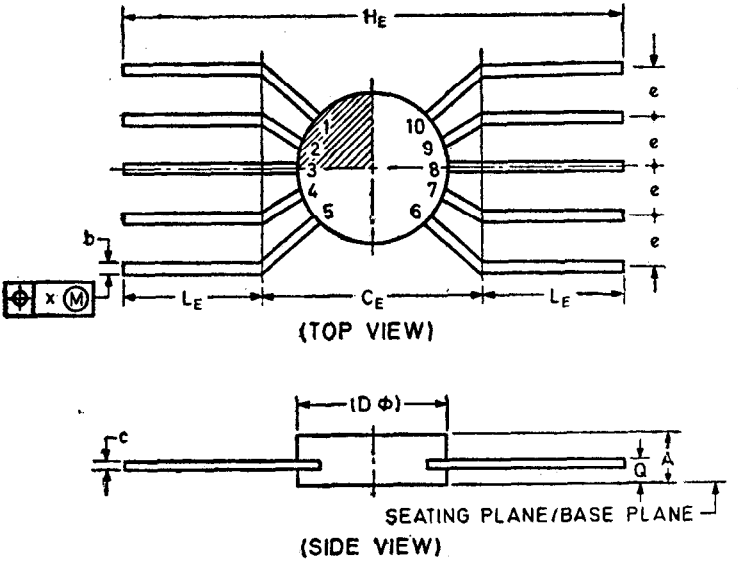

H_E
e
e
e
e
1
2
3
4
5
10
9
8
7
6
b
x M
L_E
C_E
L_E
(TOP VIEW)
(D Φ)
c
Q
A
SEATING PLANE/BASE PLANE
(SIDE VIEW)

FIG. 15

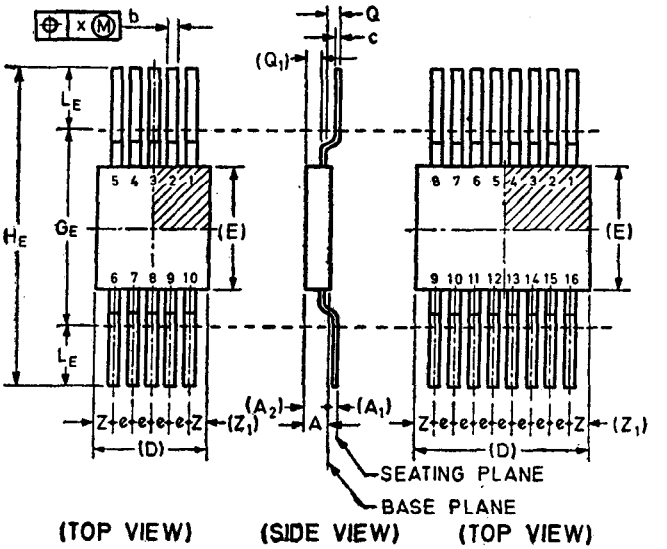

x M
b
Q
c
(Q_1)
L_E
H_E
G_E
(E)
5 4 3 2 1
6 7 8 9 10
L_E
Z e e e e e Z
(D)
(Z_1)
(A_2)
A
(A_1)
SEATING PLANE
BASE PLANE
8 7 6 5 4 3 2 1
9 10 11 12 13 14 15 16
(E)
Z e e e e e e e Z
(D)
(Z_1)
(TOP VIEW)
(SIDE VIEW)
(TOP VIEW)
16A
16B

FIG. 16

APPENDIX B

(*Clause* 7.2)

LIMITS APPLICABLE FOR THE DIMENSIONS OF INTEGRATED CIRCUIT PACKAGE OUTLINES

B-1. Where appropriate to the particular drawing being prepared, the dimension listed in the following table should be given with the associated reference letter symbol.

NOTE — The letter X under 'Form' column means that the considered dimension may be specified on a drawing classified in this Form. The five forms are defined in **3** and Appendix A.

Reference Letter Symbol	Dimension	Form 1	Form 2	Form 3	Form 4	Limits		
						Min	*Nom*	*Max*
A	Seat height	X	X	X	X	—	—	max
A_1	Stand-off height	X	X	X	X	min	—	—
A_2	Package height	X	X	X	X	min	—	max
ϕa, ϕa_A, ϕa_B	Terminal circle diameter	—	—	X	—	—	nom	—
B	Stand-off major dimension*	X	X	X	X	min	—	max
B_1	Stand-off minor dimension*	X	X	X	X	min	—	max
ϕB	Stand-off diameter*	X	X	X	X	min	—	max
b	Terminal width*	X	X	—	X	min	—	max
b_1, b_2, b_3	Other terminal width(s)*	X	X	—	X	—	—	max
ϕb, ϕb_1, ϕb_3	Terminal diameter(s)*	X	X	X	X	—	—	max
ϕb_0, ϕb_2	Terminal diameter(s)*	X	X	X	X	min	—	max
c	Terminal thickness*	X	X	—	X	min	—	max
D	Package length	X	X†	—	X†	—	—	max
D_1, ϕD_2	Other package length(s)	X	X	—	X	min‡	—	max†

(*Continued*)

Reference Letter Symbol	Dimension	Form 1	Form 2	Form 3	Form 4	Limits		
						Min	*Nom*	*Max*
ϕD	Package diameter	—	—	X	X	—	—	max
ϕD_1, ϕD_2	Other package diameter(s)	—	—	X	X	min‡	—	max†
d, d_1, d_2, d_A, d_B	Stand-off spacing linear	X	X	X	X	—	nom	—
E	Package width	X	X†	—	X†	—	—	max
E_1, E_2	Other package width(s)	X	X	—	X	min‡	—	max†
e, e_1, e_2, e_A, e_B	Terminal spacing, linear	X	X	X§	X	—	nom	—
F	Flange zone height	X	—	X	—	min	—	max
F_1	Flange height	X	—	X	—	min‡	—	max†
G_D	Package length zone	—	—	—	X	—	—	max
G_E	Package width zone	—	—	—	X	—	—	max
ϕG	Package diameter zone	—	—	—	X	min	—	max
H_D	Overall length	—	—	—	X	min	—	max
H_E	Overall width	—	—	—	X	min	—	max
ϕH	Overall diameter	—	—	—	X	min	—	max
h	Index height or depth	X	X	X	X	min‡	—	max†
j	Index width	X	X	X	X	min‡	—	max†
k	Index length	X	X	X	X	min‡	—	max†
L, L_0	Terminal length(s)||	X	X	X	—	min	—	max†
L_1	Terminal length||	X	X	X	—	—	—	max
L_2, L_3	Terminal length(s)||	X	X	X	—	min‡	—	max†
L_D, L_E	Terminal length(s)||	—	—	—	X	min	—	—
M_D	Mounted length	—	X	—	—	—	—	max
M_E	Mounted width	—	X	—	—	—	—	max
n	Quantity of terminal positions	X	X	X	X	—	nom	—

(*Continued*)

Reference Letter Symbol	Dimension	Form 1	Form 2	Form 3	Form 4	Limits		
						Min	*Nom*	*Max*
n_1	Allowable quantity of missing terminals	X	X	X	X	—	nom	—
ϕP	Package mounting hole diameter	X	X	X	X	min¶	nom¶	max¶
Q	Terminal emergence height	—	X	—	X	min	—	max
Q_1	Terminal emergence dimension	—	X	—	—	min	—	max
Q_2, Q_3	Other terminal emergence dimension	—	X	—	X	min‡	—	max†
Z, Z_1, Z_2	Package overhang(s)	X	X	—	X	—	—	max**
α, α_A, α_B	Index datum angle(s)	—	—	X	—	—	nom (*k*)	—
β, β_A, β_B	Terminal spacing, angular	—	—	X	X	—	nom (*k*)	—
γ, γ_1, γ_2	Angular features associated with the base	—	—	X	X	min‡	—	max†
θ	Terminal spread, angular	—	X	—	—	min	—	max
θ_1, θ_2	Angular features associated with the package	X	X	X	X	min‡	—	max†

*To distinguish in the same drawing between major or minor dimensions or diameters of different stand-off, or between widths, thicknesses or diameters of different terminals, the signs(′) prime, (″) second, etc may be used with reference letter symbols B, B_1, ϕB, b, b_1, b_2, b_3, ϕb, ϕb_1, ϕb_2, ϕb_3 and c.

†Maximum dimension may be omitted where appropriate.

‡Minimum dimension may be omitted where appropriate.

§For rectilinear terminal positions only.

||For terminals of different lengths, the letter symbols L_z, L_y, L_x, L_w, etc may be used.

¶For holes with nominal diameters greater than 4 mm the hole shall preferably be dimensioned by reference to a bold size; in addition minimum and maximum dimensions of the hole diameter may be given if desired.

For holes with a nominal diameter equal to or less than 4 mm minimum and maximum dimensions are required.

**Information on Z as regards $\frac{e}{2}$ (for example, $Z \lll \frac{e}{2}$, $< \frac{e}{2}$ or $\leqslant e$).

(*k*) True geometrical position.

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- 1885 (Part VII/Sec 3)-1970 Part VII Semiconductor devices, Section 3 Transistors
- 1885 (Part VII/Sec 4)-1969 Part VII Semiconductor devices, Section 4 Thyristors
- 1885 (Part VII/Sec 5)-1971 Part VII Semiconductor devices, Section 5 Integrated circuits and microelectronics

2032 (Part VIII)-1965 Graphical symbols used in electrotechnology: Part VIII Semiconductor devices

3700 Essential ratings and characteristics of semiconductor devices:

- 3700 (Part I)-1972 Part I General (*first revision*)
- 3700 (Part II)-1972 Part II Low power signal diodes
- 3700 (Part III)-1973 Part III Rectifier diodes (*first revision*)
- 3700 (Part IV)-1968 Part IV Low power small signal transistors
- 3700 (Part V)-1968 Part V Powers transistors
- 3700 (Part VI)-1968 Part VI Switching transistors
- 3700 (Part VII)-1970 Part VII Reverse blocking triode thyristors
- 3700 (Part VIII)-1970 Part VIII Voltage regulator and voltage reference diodes
- 3700 (Part IX)-1972 Part IX Variable capacitance diodes

3715 Letter symbols for semiconductor devices:

- 3715 (Part I)-1971 Part I General aspects
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4400 Methods of measurements on semiconductor devices:

- 4400 (Part I)-1967 Part I General
- 4400 (Part II)-1967 Part II Low power signal diodes
- 4400 (Part III)-1968 Part III Rectifier diodes
- 4400 (Part VII)-1971 Reverse blocking triode thyristors
- 4400 (Part VIII)-1970 Voltage regulator and voltage reference diodes

4411-1967 Code of designation of semiconductor devices

5000 Dimensions of semiconductor devices

NOTE — Standards on dimensions of semiconductor devices are published in loose leaf form (individually priced) and are supplied in an attractive binder (priced separately). So far 26 standards have been published.

5001 (Part I)-1969 Guide for preparation of drawings of semiconductor devices and integrated circuits: Part I Semiconductor devices

5001 (Part II)-1973 Guide for preparation of drawings of semiconductor devices and integrated circuits: Part II Integrated circuits

5469 (Part I)-1969 Code of practice for the use of semiconductor junction devices: Part I Applicable to all devices

5469 (Part II)-1973 Code of practice for the use of semiconductor junction devices: Part II Diodes

5469 (Part III)-1973 Code of practice for the use of semiconductor junction devices: Part III Thyristors

6553-1971 Environmental requirements for semiconductor devices and integrated circuits

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